Prognostic indicators & overall survival in men presenting with PSA levels greater than 1000ng/ml.

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Introduction- Men presenting with serum PSA above 400ng/ml have high incidence of disease related morbidity with a poor overall survival. However some men with very high PSA (>1000ng/ml) have good hormone response with survival over 5 years.

The aim of this study was to determine the PSA response to hormonal therapy and assess serum levels of alkaline phosphatise (SAP), & bone metastasis with overall survival.

Material & Methods- In this retrospective study, 91 men with prostate cancer whose PSA>1000ng/ml at initial presentation were identified between May 2004-August 2009. Data regarding the treatment, clinical and biochemical response, survival were obtained from case notes.

Results-
An independent samples t-test to examine the effect of anti-androgenic therapy on survival showed a significant difference (t = 5.874 p< 0.01, unequal variances), suggesting a positive impact of therapy. Patients without metastasis achieved a larger fall in PSA than those with metastasis, indicating that change in PSA levels may be a good prognostic indicator. (F2,12=4.79, p <0.05). Chi-square test showed a significant association between SAP and metastasis status ( \( \chi^2 = 6.526, p<0.05 \)) suggesting SAP levels could be used as a predictor of metastasis. Kaplan-Meier analysis showed a significant survival advantage with anti-androgenic therapy. When metastasis is factored in as a stratifying function, the distinctions become clearer. Adding the SAP levels, demonstrates a further impact.

Conclusion-Patients presenting with PSA> 1000ng/ml have poor survival. Change in PSA levels, SAP & bone metastasis could be used as a prognostic indicator for metastasis. SAP & bone metastasis could predict survival.